A NEW GENUS AND SPECIES OF ROACH FROM THE UNITED STATES AND TROPICAL NORTH AMERICA

(ORTHOPTERA; BLATTIDAE; PANCHLORINAE)

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For some time in our studies, small series of an apparently immature Panchlorid have puzzled us, due to the fact that nowhere in the literature have we been able to place the species. Recently additional series from Panama have, on comparison, proved to represent the same species, and further study convinces us that the insect is undescribed.

At first it appeared that all of the material was immature, but after much examination and comparison we have finally reached the conclusion that we here have a species which, at least in the female sex,¹ retains in full the immature form, lacking the organs of flight, but with mesonotum and metanotum laterad produced caudad as is usual for winged Blattids in the instar preceding maturity.

The insect is clearly nearest *Pycnoscelus surinamensis* (Linnaeus). Examination of the extensive series of that species at hand leads us to believe that it is probable that many females retain to the end the immature form, only a certain number attaining a normal adult form with differently shaped pronotum and fully developed organs of flight.

When compared with large females of that species lacking organs of flight, similar females of the present insect are found to differ in being slightly more slender, with roughened surface of caudal portion of abdomen less contrastingly and sharply differentiated from the remaining polished dorsal surface, in the disto-dorsal segments of abdomen having the caudal margins more decidedly beaded and latero-caudal angles briefl but sharply acute-angulate produced, and in having more slender limbs, with armament of the same signally different and tarsal claws more elongate and slender. In general appearance the similarity is so close that confusion in determination might easily occur, were such based merely on a hurried examination.

¹ No adult males are at hand.

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PYCNOSCELOIDES new genus

Genotype.—Pycnosceloides aporus new species.

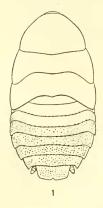
Adult female lacking organs of flight and retaining the immature form. Head as in Pycnoscelus, with wide interocular space and flattened, weakly convex face. Dorsal surface smooth and polished, except distal portion of abdomen which is roughened. apparently by the adhesion of foreign particles. Pronotum evenly convex, margin convex to latero-caudal angles which are rather broadly rounded, caudal margin weakly convex, nearly transverse, showing a slight angulation mesad. Mesonotum and metanotum with caudal margins transverse mesad, laterad acuteangulate produced caudad with apex sharply rounded. Cerci reduced, short, stout, rounded distad, sublamellate, with joints indicated only ventro-proximad. Supra-anal plate transverse. Subgenital plate ample. Limbs moderately heavy. Cephalic femora with ventro-cephalic margin supplied with a fringe of hairs. lacking a distal spine. Other ventral femoral margins entirely unarmed except ventro-caudal margin of caudal femora, which bears a small, moderately stout median spine (and very rarely a similar but smaller spine proximad). Dorsal genicular spine of median and caudal femora reduced, small and moderately stout. Pulvilli occupying entire ventral surfaces of four proximal tarsal joints, as in Pycnoscelus. Tarsal claws elongate and delicate, much surpassing the moderately well developed arolium.

Pycnosceloides aporus² new species

² From $\delta \pi o \rho o s = difficult$ to deal with.

Type.— \circ ; Motzorongo, Vera Cruz, Mexico. February, 1892. (L. Bruner.) [Hebard Collection, Type No. 495.]

Size small for the subfamily, similar to that of *Pycnoscelus surinamensis*; form not fully as broad as in females of that species lacking organs of flight. Ocellar spots small and irregular. Dorsal surface and character and armament of limbs given in generic description. Distal abdominal segments with caudal margins beaded, this minute but distinctly more decided than in *Pycnoscelus surinamensis*, latero-caudal angles of these segments briefly but sharply acute-angulate produced. Supra-anal plate subquadrate; caudal margin transverse, weakly convex in each half, forming a minute median acute-angulate emargination, latero-caudal angles broadly rounded. Subgenital plate broadly scoop-shaped, broadly concave at bases of cerci, produced and convex mesad, extending as far caudad as the supra-anal plate. Ventro-cephalic margin of cephalic femora fringed with hairs, which are not decidedly longer proximad as in *Pyenoscelus surinamensis*.



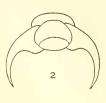


Figure 1. Pycnosceloides aporus new species. Dorsal view of type(female). $(\times 2\frac{1}{2})$

Figure 2. Pycnosceloides aporus new species. Distal outline of tarsal claw and arolium. (Greatly enlarged.)

Measurements (in millimeters)

	Length	Length	Width	Greatest	Length of
	of body	pronotum	of pronotum	width of abdomen	caudal tibia
Motzorongo, Mexico, type	17	4.9	7.1	9.1	4.8
Motzorongo, Mexico, paratype.	18	4.9	7.3	9	4.7
Pózo Azúl, Costa Rica	18	4.9	7.3	8.8	4.7
Porto Bello, Panama	18.8	5.1	7.8	10	4.9

Coloration.—Head cinnamon brown deepening to chestnut brown on face, paling to ochraceous-tawny in ocellar areas and on clypeus. In the maximum intensive condition the head is blackish chestnut brown, paling to mars brown on occiput and clypeus, with ocellar spots dark ochraceous-tawny. Dorsal surface shining chestnut brown to blackish chestnut brown, except distal portion of abdomen which is of the same color but roughened. Limbs ochraceous tawny. Ventral surface ochraceous tawny, deepening to chestnut brown on abdomen, this represented by a broad marginal suffusion or covering the entire ventral surface.

Specimens Examined: 54; 4 females, 12 immature males and 38 immature females.

Brownsville, Texas, XI, 22, 1907, (J. D. Mitchell), 1 small juv. \circ , [U. S. N. M.].

Pine Cañon, Monte Diablo, California, X, 5, 1893, (G. Eisen), 2 juv. ♀, 1 small juv. ♂, 1 small juv. ♀, [Hebard Cln.].

Orizaba, Vera Cruz, Mexico, I, 1892, (L. Bruner), 5 juv. Q, 1 small juv. \circ , 5 small juv. Q, [Hebard Cln.].

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Motzorongo, Vera Cruz, Mexico, II, 1892, (L. Bruner), $2 \circ$, 1 juv. σ , 2 juv. \circ , 2 small juv. σ , 1 small juv. \circ , type and paratypes, [Hebard Cln.].

Minatitlan, Vera Cruz, Mexico, II, 2, 1892, (L. Bruner), 1 juv. ♀, [Hebard Cln.].

Pózo Azúl de Pirrís, Costa Rica, V, 10 to 20, 1902, (M. A. Carriker Jr.), 1 $\,$ 9, 1 juv. $\,$ 0, 3 juv. $\,$ 9, [Hebard Cln.].

Porto Bello, Panama, II, 18 and 24, 1911, (A. Busck), 1 $\, \circ$, 2 juv. $\, \circ$, [U. S. N. M.].

Alhajuela, Panama, IV, 4 to 17, 1911, (A. Busck), 1 juv. \circ , 2 small juv. \circ , 4 small juv. \circ , [U. S. N. M.].

Rio Chilibre, Panama, IV, 14, 1911, (A. Busck), 1 small juv. \circ , [U. S. N. M.]. Rio Trinidad, Panama, V, 4, 1911, (A. Busck), 2 very small juv. \circ , 1 very small juv. \circ , [U. S. N. M.].

Cabima, Panama, V, 22 and 24, 1911, (A. Busek), 4 juv. \circ , 1 small juv. \circ , 1 small juv. \circ , 1 very small juv. \circ , 1 very small juv. \circ , [U. S. N. M.].

Corozal, Canal Zone, Panama, XI, 17, 1913, (Hebard; under decaying banana stem in jungle), 1 juv. \circ , 1 small juv. \circ , [Hebard Cln.].